

SZAFRAN, Z.; SZAFRAN, H.; OLEKSY, J.

Hydrolysis of carboxylic esters by dog pancreatic juice
esterases. Acta biochim.polon. 6 no.2:205-217 '59.

1. Zakład Chemii Fizjologicznej A. M. w Krakowie Kierownik:
prof. dr B. Skarzynski i Zakład Fizjologii A. M. w Krakowie
Kierownik: prof. dr J. Kaulbersz.

(ESTERASES - chemistry)

(PANCREATIC JUICE - chemistry)

SZAFRAN, Halina; SZAFRAN, Z.; OLEKSY, J.

Studies on hydrolases in digestive juices. V. Proteolytic enzymes in pancreatic juice in dogs. Acta biochim.polon. 7 no.1:51-62 '60.

1. Zakład Chemii Fizjologicznej A.M. w Krakowie. Kierownik: prof. dr B. Skarzynski. Zakład Fizjologii A.M. w Krakowie. Kierownik: prof.dr J. Kaulbersz.

(PANCREATIC JUICE chem.)

(PROTEASES chem.)

OLEKSY, J.; SZAFRAN, Halina; SZAFRAN, Z.

Studies on hydrolases in digestive juices. VI. Esterases in intestinal juices in dogs. Acta biochim. polon. 8 no. 1: 43-53 '61.

1. Zakład Chemii Fizjologicznej AM w Krakowie, Kierownik: Prof. Dr
B. Skarzynski Zakład Fizjologii AM w Krakowie, Kierownik: Prof.
Dr. J. Kaulbersz.

(ESTERASES chem) (INTESTINES)

SUCHANEK, J.; CIEKSY, J.; KAULBERSZ, J.

Effect of ACTH on pancreatic juice secretion. Acta physiol. polon.
11 no.5/6:890-891 '60.

1. Z Zakładu Fizjologii A.M. w Krakowie, Kierownik: prof. dr
J.Kaulbersz.

(CORTICOTROPIN pharmacol)
(PANCREATIC JUICE)

SZAFRAN, Z.; SZAFRAN, Halina; OLEKSY, J.

Studies on hydrolases of digestive juices. VII. ~~Proteolytic~~ activity of canine intestinal juice. Acta biochim. polon. 9 no.3:205-214 '62.

1. Department of Physiological Chemistry and Department of Physiology, Medical School, Krakow.

(PROTEASES - chemistry) (INTESTINE, SMALL - chemistry)

SZAFRAN, Z.; OLEKSY, J.

Cholinesterase activity of canine intestinal juice obtained from the Thiry-Vella fistula. Bul Ac Pol biol 11 no.3:119-122 '63.

1. Department of Physiological Chemistry, School of Medicine, Krakow. Presented by B. Skarzynski.

KRYSIK, Eugeniusz, mgr inż.; OLEKSI, Marian, inż.

Problems of utilization and modernization of steam power plants.
Energetyka Pol 17 no.5:160-163 My '63.

SKUBISZEWSKI, Feliks; ZAKHYS, Marian;

OLĘKSY, Tadeusz

Treatment of urolithiasis. Urol.polska 7:43-53 1954.

1. Z II Kliniki Chirurgicznej A.M. w Lublinie. Kierownik:
prof. dr F. Skubiszewski.

(CALCULI,

urinary, ther.)

(URINARY TRACT, calculi,
ther.)

OLEKSY, T.

SCIENCE

Periodicals: CHEMIK. Vol. 11, no. 7/8, July/ Aug. 1958.

OLEKSY, T. Seven years of the Wizow chemical plant. p. 215.

Monthly List of East European Accessions (EEAI) LC Vol. 8, No. 4,
April 1959, Unclass.

OLEKSY, Tadeusz, mgr

One million tons of sulfurous acid. Chemik 18 no.1:26-29 Ja '66.

1. Association of Inorganic Industry, Warsaw.

OLEKSY, Tadeusz, mgr

Sulfuric acid and nitric acid as phosphorite solving factors.
Chemik 18 no.2:50-52 F '65.

KONTUREK, Stanislaw; CHOLEWA, Leon; OLEKSY, Wlodzimierz

Tetracycline test in gastric carcinoma. Nowotwory 15 no.1:
17-22 Ja-Mr'65.

1. Z I Kliniki Chorob Wewnetrznych Akademii Medycznej w
Krakowie (Kierownik: prof. dr. med. L. Tochowicz) i z
Instytutu Onkologii w Krakowie (Dyrektor: prof. dr. med.
H. Kolodziejska).

Oleksynowa, J.

Special analysis of loess from the environs of Mogila;
near Cracow. J. Polarski and K. Oleksynowa (Jagielloonian
Univ., Cracow, Poland). *Bull. intern. acad. polon. sci.
Classe sci. math. nat. Ser. A*, 1951, 315-20 (1952) (in English).
A Mogila loess was analyzed chemically, microscopically,
and thermally. Chem. analyses indicated soil comp. to
consist of quartz sand 66, bentonite 7, kaolinite 2, sericite 6,
celadonite 2, and limonite 4%. Thermal and microscopic re-
sults were similar. J. R. Mellenty

OLEKSYNOWA, KRYSZYNA

POL.

1. Chemical characteristics of cement dust (from cement plants) and their value for agriculture. Krystyna Oleksynowa (Wyższa Szkoła Rolnicza, Kraków, Poland). *Cement-Wapno-Gips* 11(20), 82-4(1955).--Mineral compn. of cement dust and its high soly. in water and 2% citric acid (amounting to 72.02%) indicate that the dust is a good fertilizer. The dust had a bulk d. 0.85 g./cc. and sp. gr. 2.60; its water ext. had pH 8.6 (owing to hydrolysis of CaCO_3). The dust was extd: first with water, then with a 2% water soln. of citric acid, and then with 18% HCl by using for 1 g. of the dust 100 g. of each solvent. The water ext. contained NaCl 0.34, KCl 1.48, K_2SO_4 8.85, CaSO_4 1.08, CaCO_3 1.83 and O_2 0.21%. The citric acid ext. contained Al_2SiO_5 15.41, Fe_2SiO_4 2.48, K_2SiO_3 5.29, CaSiO_3 0.71, CaSO_4 2.21, CaCO_3 21.88, MgCO_3 2.03, and CO_2 0.33%. The HCl ext. contained MgSiO_3 1.23, Na_2SiO_3 0.18, K_2SiO_3 0.59, CaSiO_3 0.23, CaO 2.49, Fe_2O_3 2.41, and Al_2O_3 0.87%. The residue contained SiO_2 19.35, Al_2O_3 1.40, Fe_2O_3 0.50, CaO 0.27, and MgO 0.03%. All the above percentages refer to the total dust. The author surmises that an acid soil will also be able to dissolve the silicates sol. in 2% citric acid and ppt. later SiO_2 in a colloidal form which will be able to cement the particles of soil thus conditioning it. Cement dust as K fertilizer is important for Poland which has to import nearly all K fertilizers.

F. J. Hendel

Oleksynowa, K.

POLAND / Cosmochemistry. Geochemistry. Hydrochemistry.

D

Abs Jour : Ref Zhur - Khimiya, No 14, 1959, No. 49074

Author : Tokarski, J. and Oleksynowa, K.

Inst : Not given

Title : Mineralogic Analysis of Glauconite from Zawichost
(Kieleckie Vovodstvo [District])

Orig Pub : Zesz Nauk Wyzszej Szkoły Rolniczej Krakowie,
No 2, 27-33 (1957)

Abstract : The authors have applied microscopic and chemical analytical methods to the investigation of glauconite sands consisting of 40% glauconite and 60% quartz. The following minerals were identified in the heavy fraction: zirconium, tourmaline, kyanite, rutile, staurolite, and andalusite. The chemical composition of the glauconite was found to be as follows (in %): SiO_2 49.47, TiO_2 0.02, PtO_5 traces,

Card 1/2

OLEKSYNOWA, Krystyna

Mineralogical and chemical characteristics of phosphorites from
Chalupki. Archiw min 23 no.2:215-270 '59 [publ. '62].

1. Department of Soil Science, College of Agriculture, Krakow.

GNATYUK, D.I.; SILIN, B.I.; IGNATKIN, I.A., red.; KASIMENKO, A.K., red.;
KOSARIK, D.M., red.; OLEKSYUK, I.N., red. [deceased];
STAROVOTYENKO, I.P., red.; HEREZINA, Z., red.; LYAMKIN, V.,
tekhn.red.

[Sights of the Ukraine] Dostoprimechatel'nosti Ukrainy. Izd.2.,
perer. i dop. Kiev, Gos.izd-vo polit.lit-ry USSR, 1960. 797 p.
(MIRA 14:3)

(Ukraine--Guidebooks)

OLEKSYUK, N.F., starshiy leytenant

Balancing circuit. Vest. protivovozd. obor. no. 2:71 F '61.
(MIRA 14:2)

(Telephone cables)

OLEKSYUK, V.D.

Manual device for closing penicillin jars with metal tops. Farmatsev zhur. 19 no.4:64-65 '64. (MIRA 17:11)

1. Upravlyayushchiy aptekoy No.5 g. Ivano-Frankovska.

MAKSIMOV, V.P.; TOKOY, I.N.; PETUKHOV, Ye.I.; OLEKSYUK, V.I.

Controlling the losses of reservoir energy in the production of
gas on the Shebelinka gas field. Gaz. delo no.8:8-12 '64.
(MIRA 17:9)

1. Shebelinskoye gazopromyslovoye upravleniye.

TOKOY, I.N.; OLEKSYUK, V.I.; GERISH, P.A.

Present status of the development of the Shebelinka field. Gaz. delo
no.7:6-11 '65. (MIRA 18:9)

1. Shebelinskoye gazopromyslovoye upravleniye.

COUNTRY : Poland
CATEGORY :

E-3

ABST. JOUR. : RZKhim., No.

1959, No. 86285

AUTHOR

: Buchowski, H.; Olempska, Z.

INST.

TITLE

: Extraction Analysis of Nitrobenzoic Acids.

ORIG. PUB. : Chem. analit., 1958, 3, No 3-4, 635-640

ABSTRACT : A study of the correlation between distribution coefficient of o- and p-nitrobenzoic acid in water-organic solvents systems, and the pH values. It was found that these acids can be determined in a mixture by carrying out the polarography of aqueous solutions of their mixtures before and after extraction with a mixture of toluene (I) and ether (II). To 2 ml of $1 \cdot 10^{-3}$ - $2 \cdot 10^{-3}$ M solution of acids in 0.3 M acetate buffer solution (pH 4.2) is added 0.1 ml 0.005% solution of thymol, H_2 is passed in, and the mixture is subjected to polarography at $20 \pm 0.5^\circ$, and at E from 0 to -1.4 v. Then, 5 ml of the same solution of acids are shaken with 5 ml of a mixture of I and II (1:3)

CARD: 1/2

121

POLAND

OLEMPKA, Zofia; NIEMYSKI, Tadeusz

Department of Semiconductor Technology, Institute
of Physics, Polish Academy of Sciences (Zaklad
Technologii Polprzewodnikow, Instytut Fizyki,
PAN (for both)

Warsaw, Przeglad elektroniki, No 5, May 1966, pages
223-228

"Preparation of boron by hydrogen reduction of boron
trichloride."

USHAKOVA, Dora Vasil'yevna; KHRISTICH, O.G. [Khrystych, O.H.], kand.
ekon. nauk; BUTKO, S.D., prof., otv. red.; OLENCHENKO, F.I.,
red.; TROKHIMENKO, A.S. [Trokhymenko, A.S.], tekhn. red.

[Collected problems on general statistical theory] Zbirnyk
zadach z zahal'noi teorii statystyky. Kharkiv, Vyd-vo
Kharkivs'koho univ., 1962. 190 p. (MIRA15:11)
(Statistics—Problems, exercises, etc.)

AUTHOR: Olenchenko, G. ^Y/_E. (Economist). 110-7-17/30

TITLE: On the question of improving economics work in undertakings of the electrical industry. (K voprosu ob uluchshenii ekonomicheskoy raboty na predpriyatiyakh elektropromyshlennosti).

PERIODICAL: "Vestnik Elektropromyshlennosti" (Journal of the Electrical Industry), Vol.28, No.7, 1957, p.60 (USSR).

ABSTRACT: Number 9 of the journal for 1956 contained two articles on the study of economics and the organisation of production, one by Nelidov and the other by Peltsman and Kanevskii. Both articles were based on criticism of a recently issued textbook on the subject. This short note is a contribution to the discussion on these two articles. It states that there is a great need for better norms and methods of production and economic planning, and for analysis and accounting in production. In many electrical factories questions of the organisation of production and economic planning do not receive the attention they deserve. This is partly because young engineers are inadequately trained in these matters. In particular there is a shortage of good text books on concrete questions of economics. Existing books are full of

Card
1/2

S/122/60/000/009/010/015
A161/A026

AUTHOR: Olenchenko, G.Ye.

TITLE: Some Measures for Improving Production Organization and Economy in Industrial Installations

PERIODICAL: Vestnik mashinostroyeniya, 1960, No. 9, pp. 71 - 73

TEXT: The author reviews the present situation and makes organizational suggestions. Many works tolerate unnecessary expenses, the production plans are not being prepared in due time and are not always reasonable; the Sovnarkhozes frequently issue income plans without any proper calculations and make the output of obsolete machines seem more profitable for the industrial works than of the new and better ones, make the conditions for some works easy, hard for others. Many works have no specialists for production organization and make it a function of the chief technologist, the production department, the personnel section, planning department, and of the chief accountant. The ways and methods of planning, procurement, accounting and organization in general are different at different works, and not satisfactory. Scientists know too little of practical production problems, and there are no manuals on this subject. The author thinks

Card 1/2

S/122/60/000/009/010/015
A161/A026

Some Measures for Improving Production Organization and Economy in Industrial Installations

that the old abolished way of organization was better when an engineer especially assigned was in charge, or an "orgbureau" (organization bureau) in large machine works, where production engineers worked together with economists, and the technical information bureau cared for the popularization of better methods and specialists studied the practices in other works and cared for better organization and profits (this is mentioned as being practiced in many industrial works abroad). The author's suggestions are: to decide who is to be assigned with organization in the works; to establish a central institute that would coordinate and provide for instructions and practical assistance; to introduce a position of engineer in charge of production organization and production economy at smaller installations, and a corresponding bureau in larger ones; to organize a publishing council with the Gosudarstvennyy komitet po avtomatizatsii i mashinostroyeniyu (State Committee for Automation and Machine Building), and to publish instructions and manuals only after approval by this council; to organize conferences on this problem.

Card 2/2

OLEN'CHENKO, I.

Jan 49

USSR/Chemistry - Aniline, Alkylation of
Chemistry - n-Butene

"Catalytic Alkylation of Aniline With n-Butene," K. Lavrovskiy, A. Minkhovskaya,
I. Olen'chenko, 3 pp

"Dok Ak Nauk SSSR" Vol LXIV, No 3

Concludes: (1) Synthetic aminosilicates, used for catalytic cracking, are active catalyzers in the alkylation of aromatic amines. (2) During subject alkylation, amines form with a substitution group in the nucleus. Alkylation is accompanied by cracking, destructive alkylation and ring formation with n-toluidine forming as the chief product of reaction. (3) Synthetic aminosilicates cause a Hofmann regrouping of the substituted aromatic amines. Submitted 24 Nov 48.

PA 27/49T5

OLENCHENKO, V.I.

Veterinary workers of Volyn' Province in the effort to fulfill
the seven-year plan in 4 years. Veterinariia 57 no.9:24-27
S '60. (MIRA 14:11)

1. Nachal'nik veterinarnogo otdela oblsel'khozupraveniya,
Volynskaya oblast' (Volyn' Province--Veterinary hygiene)

VOICHKOV, P.M.; RYKOV, V.D.; OLENDAREV, N.S.

Reinforced concrete blocks for lining vertical mine shafts. Gor. zhur.
no. 4:48 Ap '58. (MIRA 11:4)
(Concrete blocks--Patents)

VOLCHKOV, P.M., inzh.; OLENDAREV, N.S., inzh.; RYKOV, V.D., inzh.

Shaft sinking with preliminary rock cementation. Shakht. stroi.
no.6:27-29 '58. (MIRA 11:6)

(Shaft sinking) (Grouting)

CHROSCICKI, Stanislaw; CZECHOWICZ, Magdalena; OLENDER, Andrzej;
RADOMSKA, Maria

Tissue reactions to experimental perlon implants. Pol. przegl.
chir. 36 no.6:781-787 Ja '64

1. Z II Kliniki Chirurgicznej Akademii Medycznej w Warszawie
(Kierownik: doc. dr. Z. Lapinski).

GEBICKI, Zdzislaw; OLENDER, Kornel

Movable lighting installations. Wiadom gorn 12 no.7/8:259-261
Jl-Ag '61.

OLENDER, Kornel, mgr., inż.

The moment reverting the excavating push shovel. Przegl mech 20
no.18:554-557 S '61.

1. Zakłady Konstrukcyjno-Mechanizacyjne Przemysłu Węglowego, Gliwice.

JASINSKI, Stanislaw, inz.; OLENDER, Kornel, mgr inz.

Improvements of the hydraulic control system. Przegl
mech 21 no.18:567-570 25 S '62.

1. Zakłady Mechaniczne, Lubedz (for Jasinski). 2. Zakłady
Konstrukcyjno-Mechaniczne Przemysłu Węglowego, Gliwice (for
Olender).

OLENDER, Kornel, mgr. inz.

Traction performance characteristics of pneumatic caterpillar
loaders. Przegl gorn 19 no.5:224-228 My '63.

GEBICKI, Zbigniew, mgr inż.; OLENDER, Kornol, mgr. inż.

Electrohydraulic drive of caterpillar chassis. Przegl mech
22 no. 19 10:599-603 0 '63.

1. Zakłady Konstrukcyjno-Mechanizacyjne Przemysłu Węglowego,
Gliwice.

OLENDER, Kornel, mgr inż.

Weight of machines. Przegl mech 22 no. 23-729-731 10 D '63.

1. Mechanical Construction Works of Coal Industry, Gliwice.

UL'YANOV, V.; OLENDER, S.

Here they are, the hidden potentialities of increasing accumulations and budget incomes. Fin. SSSR 22 no.9:76-80 S '61. (MIRA 14:9)

1. Glavnyy kontroler-revizor kontrol'no-revizionnogo upravleniya Ministerstva finansov Ukrainskoy SSR po Odesskoy oblasti (for Ul'yanov). 2. Starshiy kontroler-revizor kontrol'no-revizionnogo upravleniya Ministerstva finansov Ukrainskoy SSR po Odesskoy oblasti (for Olander).

(Odessa Province--Capital)

(Odessa Province--Industrial management)

OLENDRZYŃSKI, W., mgr inż.

Dependence panels for E-type relay installations of the train running protection system and modern methods of dependence recording. Przegl kolej elektrotech 14 no.2:61-64 F '62.

OLENDSKI, W.; ZAKIEWICZ, B.; MALINOWSKI, J.

"Economic Geology in the Service of Socialistic Building." p.17
(PRZEGLAD GEOLOGICZNY No. 1/2, Jan./Feb. 1954 Warszawa, Poland)

SO: Monthly List of East European Accessions, LC, Vol. 3, no. 5, May 1954/Uncl.

CLUB NI, W.

"Thirty-eight Years of Soviet Foreign Policy", (OFFICIAL PUBLICATION,
No. 11, November 1954, Warsaw, Poland)

SO: Monthly List of East European Agencies (C. A.), 1/1, Vol. 1, No. 1,
March 1955, Uncl.

OLENDSKI, W.

"Tasks and development of a geologic service in Korea." p. 17,
(PREZEBGLAD GEOLOGICZNY. Nol. 1, Jan. 1955. Warszawa, Poland)

SO: Monthly List of East European Accessions. (EBAL). LC. Vol. 4, No. 4.
April 1955. Uncl.

OLENDSKI, W.; LYCZEMSKA, J.

Hydrographic and Geologic Map of Poland. p. 481.
A program of chemical analysis suggested by the Central Bureau of
Geology for the documentation of industrial mineral resources. p. 489.
A scientific session of the Institute of Geology devoted to geologic
structure of the Coal Basin in Upper Silesia. p. 490.

No. 10, Oct. 1955

PRZEGIAD GEOLOGICZNY
Warszawa

SOURCE: East European Accessions List (EEAL), IC, Vol. 5, no. 2, Feb. 1956

OLENDESKI, W.; BIELECKA, W.

Terminology used in the description of Foraminifera. (Conclusion) p. 495.

No. 10, Oct. 1955

PRZEGLAD GEOLOGICZNY
Warszawa

SOURCE: East European Accessions List (EEAL), LC, Vol. 5, no. 2, Feb. 1956

OLENDSKI, W.: KLINSKI, T.

The hydrogeologic observations concerning drilling for mineral raw material.
p. 159

PRZEGLAD GEOLOGICZNY. (Wydawnictwa Geologiczne)
Warszawa, Poland. Vol. 7, No. 4, Apr. 1959.

Monthly list of East European Accessions (EEAI) LC. Vol. 8, No. 7, July 1959

Uncl.

OLENDSKI, Witold

The elastic resources of artesian waters and oil. Przegl geol 8
no.10:519-521 0 '60. (EEAI 10'9)

1. Centralny Urzad Geologii.

(Petroleum) (Water)

OLENDSKI, Witold

Connection of the origination of brown coal deposits with
the tectonics of the substratum. Przegl geol 10 no.11:576-579
N '62.

1. Centralny Urzad Geologii, Warszawa.

OLENDZKI, Witold

Remarks on balancing the evaluation of brown coal deposits during
their geological recognition. Przegl geol 10 no.12:632-636
D '62.

1. Centralny Urząd Geologii, Warszawa.

OLENDSKI, W.

Application of mathematics in geological research.
Przegl. geol 10 no.11:628 N '62.

MARASEK, Andrzej, inż.; OLENDZKI, Witold, dr.inż.

Wells without filters. Gosp wodna 22 no.8:352-357 '62.

1. Centralny Urząd Geologii, Warszawa.

USSR/Electronics - Antenna Theory OLENSKIY, V. A.

FD - 1935

Card 1/1

Pub: 90, 4/9

Author : Fradin, A. Z. and Olendskiy, V. A.

Title : Antenna effect of symmetrical feeder

Periodical : Radiotekhnika, 10, 29-39, Feb 55

Abstract : The antenna effect in the radio receiving stations can be considerably reduced by using coaxial cables, shielding or transposition of the feeders. A general method of solving problems related to the antenna effect, caused primarily by the non-symmetry at the input of the radio receiver, are examined in some details. Analysis of the antenna effect phenomenon was based on the theory of non-symmetrical lines, as worked out by Pistol'kors, A. A., and on the theory of multi-pole network circuits. Results of this study shows the relationship between the antenna effect and the magnitude of non-symmetry, the dimensions of antenna-feeder system, the wave length, and the conditions of ground. This method of solution can be readily extended, with slight modification, to the radio transmission system.

Institution: --

Submitted : May 10, 1952

FRADIN, A.Z., kandidat tekhnicheskikh nauk; OLENDSKIY, V.A., kandidat
tekhnicheskikh nauk.

General solution of a problem of antenna effect in feeders arising
from the effect of unsymmetrical receiver input. Sbor.trud.Len.elek.
inst.sviazi no.1:48-69 '56. (MIRA 10:1)
(Radio--Receivers and reception)

SOV/106-58-4-5/16

AUTHORS: Fradin, A.Z. and Olendskiy, V.A.

TITLE: Measurement of the Input Asymmetry of Radio Receivers
(Ob izmerenii asimmetrii vkhoda radiopriyemnikov)

PERIODICAL: Elektrosvyaz', 1958, Nr 4, pp 30 - 35 (USSR)

ABSTRACT: Correct operation of a symmetrical receiver system, consisting of an antenna, a line feeder and a receiver input, demands strict symmetry in all its elements. Methods of measuring the asymmetry of antennae and feeders have been developed (Reference 1). In this article is developed a method for measurement of the asymmetry of the receiver input and related parameters.

The antenna effect of an uncovered feeder line is conveniently evaluated by the feeder reception coefficient (Refs 2 and 3) by which is meant the ratio of the voltage at the grid of the first valve of the receiver, due to the feeder and antenna when working in a co-phase regime, to the voltage at the same points due to the antenna when working in an anti-phase wave regime. It is also assumed that the fields which excite both the co-phase and anti-phase waves are similar and come from the main maxima of the polar diagrams of the antenna-feeder system for the co-phase and anti-phase wave.

Card1/6 The feeder reception coefficient depends on two forms of

SOV/106-58-4-5/16

Measurement of the Input Asymmetry of Radio Receivers

asymmetry: impedance asymmetry and emf asymmetry. The physical concepts behind these two forms are illustrated in Figure 1. Here, by Z_H is meant the impedance between the receiver input terminals and by Z' and Z'' the leakage impedances between each input terminal and the earthed chassis of the receiver. The coefficients M , M' and M'' characterise the coupling of the receiver input circuit to the feeder coil L_ϕ and to the side branches of the three terminal network, respectively. As an example, Figure 1 shows transformer coupling but other forms of coupling can be used. Impedance asymmetry is characterised by the difference between Z' and Z'' and is qualitatively determined by the coefficient:

$$A_z = \frac{Z' - Z''}{Z' + Z''} \quad (1)$$

Asymmetry of the emf E' and E'' , which appear at the input terminals when a voltage U_0 is applied to the input circuit, is characterised by the difference between M' and M'' . The

Card 2/6

SOV/106-58-4-5/16

Measurement of the Input Asymmetry of Radio Receivers

emf asymmetry is evaluated by the coefficient:

$$\dot{A}_E = \frac{\dot{E}' + \dot{E}''}{\dot{E}' - \dot{E}''} \quad (2)$$

The emf and impedance asymmetries can either increase the feeder reception coefficient or, by compensating each other, reduce the feeder reception coefficient. Apart from \dot{A}_Z and \dot{A}_E , the reception feeder coefficient also depends on the parameter:

$$\dot{m} = \frac{2\dot{Z}'\dot{Z}''}{\dot{Z}_H(\dot{Z}' + \dot{Z}'')} \quad (3)$$

which the author calls the receiver input leakage coefficient and on the receiver input impedance (\dot{Z}_{BX}):

$$\dot{Z}_{BX} = \frac{\dot{Z}_H(\dot{Z}' + \dot{Z}'')}{\dot{Z}_H + \dot{Z}' + \dot{Z}''} \quad (4)$$

Card 3/6

SOV/106-58-4-5/16

Measurement of the Input Asymmetry of Radio Receivers

The relationship between the feeder reception coefficient and the basic parameters of the antenna-feeder system and of the receiver input is given (Eqs.(5) and (6)).

To obtain the impedance asymmetry coefficient A_z and the leakage coefficient \dot{m} , the three-circuit method illustrated in Figure 2 is used. The input conductances of the tuned receiver are first measured using a high-frequency bridge, and then the coefficients A_z and \dot{m} are calculated from the values obtained.

Circuit 1, without the input terminal earthed, can be used to measure the input impedance of the receiver.

The emf asymmetry coefficient A_E can be measured by anti-phase and co-phase connection of the emf to the receiver input.

In this method, a voltage of the required frequency from a high-frequency generator with a symmetrical output is applied to the tuned receiver input terminals in two ways, as shown in Figure 3. Circuit 'a' provides the anti-phase supply and circuit 'b' the co-phasal supply.

Card 4/6

SOV/106-58-4-5/16

Measurement of the Input Asymmetry of Radio Receivers

The generator voltages are set so that the receiver output voltage is the same for both circuits. Measurements of the asymmetry coefficients A_Z and A_E and the leakage parameters were made on two types of receiver (KTF-1, AR-88) over a frequency band of 6 to 16 Mc/s at 2 Mc/s intervals. A Marconi high-frequency measuring bridge was used and, for the circuits of Figure 3, a generator GSS-6 was used. The results are given in Tables 1 and 2. The receiver KTF-1 has coefficients A_Z and A_E of several percent, lying within the accuracy limits of the measurements. The parameter m is very large over practically the whole of the shortwave band. The coefficient A_Z for the AR-88 is also very small. The coefficient A_E has different values for different frequencies in the sub-band, changing from 0.8 to 2.8. The leakage parameter m is less than for the KTF-1 but has a sufficiently high value. Calculated values for the feeder reception coefficient for

Card 5/6

SOV/106-58-4-5/16
Measurement of the Input Asymmetry of Radio Receivers

two types of antennae - rhombic and symmetrical resonators - are given in Table 3. The data corresponds to the most favourable case of minimum feeder reception coefficient which occurs with very long feeders and with high attenuators. There are 3 figures, 3 tables and 3 Soviet references.

SUBMITTED: April 5, 1957

Card 6/6 1. Radio receivers--Performance 2. Impedance--Measurement
 3. Antenna--Performance 4. Mathematics--Applications

39714
S/142/62/005/002/017/019
E192/E382

9.1000

AUTHOR: Olendskiy, V.A.

TITLE: On the problem of evaluating the radiation of
a lossy conductor

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy,
Radiotekhnika, v. 5, no. 2, 1962, 272 - 276

TEXT: The system considered is illustrated in Fig. 1, where
 Z_H is the load impedance and l is the length of the conductor.
The radiation pattern of such a system can be determined by
several approximate methods. An accurate formula can be derived
by taking the basic equation from the book of G.Z. Myshenberg
(Antennae for main radio-communication links, Svyaz'izdat, 1948).
The formula is used to determine the radiated electrical field
and the radiation pattern for the case when the attenuation
of the conductor is comparatively small, the load impedance is
purely resistive and equal to the wave impedance of the
conductor and the length of the conductor is a multiple of
one-half the operating wavelength. An expression for the
effective length of this type of antenna is given as:
Card 1/3

On the problem of

S/142/62/005/002/017/019
E192/E382

$$l_0 = \frac{2l e^{-\frac{\beta l}{2}}}{n} F(\varphi_0) \quad (8)$$

where β is the attenuation constant of the conductor
 n is an integer and
 $F(\varphi_0)$ is the value of the radiation-pattern function
 in the direction of the principal radiation-
 maximum.

The formulae are used to determine the radiation patterns for
 an antenna having a length $l = 10 \lambda$ ($n = 20$) and $\beta = 1/5\lambda$.
 The effective length of the antenna for these conditions
 is $l_0 = 0.13 l$; if the conductor is assumed to be loss-less
 the effective length is $0.27 l$; further, if the attenuation

Card 2/3

ACC NR: AR6000129

SOURCE CODE: 064 007-1 -SI ---

SOURCE: Ref. zh. Fizika, Abs. 6Zh38

AUTHOR: Olendskiy, V. A.

ORG: none

TITLE: Parametric ²⁵frequency converter with detuned tank circuits

CITED SOURCE: Tr. uchebn. in-tov svyazi. M-vo svyazi SSSR, vyp. 23, 1964, 59-67

TOPIC TAGS: frequency converter, parametric converter, receiver tuning, receiver bandwidth

TRANSLATION: A calculation is presented for the characteristics of a double-loop parametric frequency converter using a semiconductor diode with two detuned tank circuits. It is proposed that both circuits have the same bandwidth and be determined in one direction by an equal amount Δf_0 . An analysis of the system is by the complex-amplitude method. In the presence of detuning of the tank circuits, the reactances introduced into the circuits turn out to be of opposite sign to the proper reactances of the tank circuits and can cancel each other. As a result, the influence of a change in frequency becomes smaller than when exactly tuned circuits are used, thus indicating the possibility of increasing the bandwidth of the given device. In the case considered, the conversion coefficient depends on the detuning of the circuits and the amplification can be regulated by selecting the amount of detuning. An appreciable conversion coefficient is realized when the values of the depth of

Card 1/2

E 9179-66

ACC NR: AR6000129

modulation (M) of the parametric diodes are larger than the corresponding values of M in the case of a converter with exactly tuned circuits, i.e., in the presence of detuned circuits it is necessary to increase the pump level. It is pointed out that an increase in the depth of M can avoid deterioration of the noise temperature of the amplifier which should be expected as a result of the influence of the detuned circuits. Yu. Khotuntsev.

SUB CODE: 09

L 47042-66 ENT(1)

ACC NR: AR6004342

SOURCE CODE: UR/0274/65/000/009/B075/B075

AUTHOR: Olendskiy, V. A.

REF SOURCE: Tr. uchebn. in-tov svyazi. M-vo svyazi SSSR, vyp. 23, 1964, 59-67 33
B

TITLE: A parametric frequency converter using detuned circuits

SOURCE: Ref. zh. Radiotekhnika i elektrosvyaz', Abs. 9B528 25

TOPIC TAGS: frequency converter, transistorized circuit

TRANSLATION: A parametric frequency converter using crystal diodes and two detuned circuits is considered as a quasilinear network. It is assumed that both circuits have identical bandpass characteristics and are each detuned to the same side by an amount Δf_0 . The analysis of the system is developed using complex amplitudes. When the circuits are detuned, the reactive conductance of the detuned circuits is opposite in sign to the characteristic conductance of the rest of the circuit. The two conductances are thus compensating. As a result, the influence of any variation in frequency is smaller than that of a converter using circuits tuned to resonance. This shows that the bandwidth of the system may be increased. In the case of the detuned circuits the conversion coefficient depends upon the amount of detuning and the amplification. It is possible to control the gain by regulating the detuning. With detuned circuits it is necessary to increase the pumping frequency level. The increase of

Cord 1/2

UDC: 621.395.622

L 47042-66

ACC NR: AR6004342

modulation intensity permits one to avoid the deterioration of the noise temperature index. This is to be expected because of the influence of the detuned circuits. Estimates of the noise temperature are made under the assumption that the noise of crystal diodes and the pump generator are negligibly small. The amplitude stability coefficient, i. e., the relative change of the square of the parametric coefficient of frequency divided by the relative change of the working amplification of the system, is reduced as the amount of detuning is increased. 6 figures, 1 reference. Yu. Kh.

SUB CODE: 09/

~~SUBJ: DATA: none~~

Card 2/2 *OLR*

OLENDZKAYA, N F

8(3)

PHASE I BOOK EXPLOITATION

SOV/1386

Moscow. Nauchno-issledovatel'skiy institut postoyannogo toka

Peredacha energii postoyannym i peremennym tokom (Power Transmission by Direct and Alternating Current) Moscow, Gosenergoizdat, 1958. 334 p. (Series: Its: Izvestiya, sb. 3) 3,350 copies printed.

Ed.: Pintsov, A.M.; Tech. Ed.: Voronetskaya, L.V.; Editorial Board: Shchedrin, N.N., Doctor of Technical Sciences, Corresponding Member, Uzbek SSR Academy of Sciences, Professor (Chief Ed.); Gertsik, A.K., Engineer; Yemel'yanov, V.I., Candidate of Technical Sciences; Pimenov, V.P., Candidate of Technical Sciences; Pintsov, A.K., Candidate of Technical Sciences; Posse, A.V., Candidate of Technical Sciences; Sena, L.A., Doctor of Physical and Mathematical Sciences, Professor; Sonin, M.R., Engineer; Shekhtman, M.G., Candidate of Technical Sciences.

PURPOSE: This collection of articles, issued by the USSR Ministry of Electric Power Stations, is intended for scientists, engineers and designers of high-voltage overhead transmission lines.

Card 1/13

Power Transmission by Direct and Alternating (Cont.)

SOV/1386

COVERAGE: The collection covers various problems connected with d-c and a-c high-voltage transmission lines, gives theoretical fundamentals of these problems and describes experimental investigations and practical conclusions. References appear separately after each article.

TABLE OF CONTENTS:

SECTION I. DIRECT CURRENT

Aleksandrov, D.D., N.F. Olendzskaya, and S.V. Ptitsyn . Investigation of Electric Strength of High-voltage Mercury Rectifiers

5

Experimental investigation of mercury rectifiers was extensively carried out recently by NIIPT of MES (Direct-Current Scientific Research Institute of USSR Ministry of Electric Power Stations) in substations of the Kashira-Moscow and Stalingrad-Donbass electric transmission systems. The "circulation manometer", recently developed by NIIPT, made it possible to investigate the effect of foreign gas admixtures in mercury vapor on the electric strength of a high-voltage rectifier. The results of this investigation have now been introduced in practice. There are 9 diagrams and drawings, and 13 references, of which 5 are Soviet, 5 English and 3 French.

/L:

Power Transmission by Direct and Alternating (Cont.)

SCV/1386

Panov, I.P. Dielectric Ignitor for Cathode Spot Firing

20

Experimental investigation of cathode spot firing carried out in the laboratories of NIPT has proved that dielectric ignitors are free of the many disadvantages characteristic of semiconductor ignitors. Dielectric ignitors are recommended for use not only in mercury rectifiers, but also in various gas-discharge devices where forced repetitive firing is required. There are 9 diagrams and drawings and 7 references, of which 4 are English and 3 Soviet.

Matyashevich, V.V. Formation of Mercury Condensate in an Operating Rectifier

31

Investigation has been carried out on the effect of mercury condensate droplets on the operating stability of mercury rectifiers. Experimental results made it possible to make recommendations on operating techniques and some design changes as well. There are 7 diagrams and drawings and 5 references, all Soviet.

Dolgikh, V.A., and N.I. Lavrov. Investigation of Voltage Distribution in the Plate Circuit of a High-voltage Mercury Rectifier

43

Card 3/13

Power Transmission by Direct and Alternating (Cont.)

SOV/1386

Investigations carried out by V.D. Andreyev and B.G. Mendeleev in 1949-1950 at V&I on voltage distribution in the plate circuit of a type V-1 (VR-50/120) mercury rectifier showed considerable unevenness of distribution. The recommendation was to increase the power of the plate voltage divider. In 1953 at the Electrovacuum Laboratory of NIPT a series of measurements was completed by V.A. Dolgikh, I.G. Goloshchekin and N.I. Lavrov (and in 1954 V.A. Ivanchenko) on the dependence of voltage distribution on operating conditions. The measurement method was developed by L.N. Volkov and D.D. Knyazev and was based on the use of an oscillograph and a capacitive voltage-divider. In conclusion, the authors recommend some changes in operating practice and in design. There are 3 tables of oscillograms, 4 diagrams and 5 Soviet references.

Gertsik, A.K. Ionization Characteristics of Paper-Oil Capacitor

Insulation During Application of Voltage With a Distorted Wave Form

62

The above characteristics were obtained as a result of experimental investigation carried out in NIPT laboratories by the author and junior scientists V.P. Matveyev and D.S. Lavrov. There are 13 diagrams and drawings and 14 references, of which 7 are Soviet and 7

Caru -/15

- Power Transmission by Direct and Alternating (Cont.) SOV/1386
- Merkhalev, S.D. Wet Flashover Voltage Characteristics of Insulators in D-C Transmission Lines 89
 The investigation was carried out at NIIPT by the author on P-7, Sht-35, IShD-35, KO-400 and MP-220 type insulators. There are 6 diagrams and drawings and no references.
- Groys, Ye.S. Insulation Test Voltage Requirements in the Stalingrad GES-Donbass Transmission System 100
 This article is the result of the author's experience gained from his participation in designing the Stalingrad GES-Donbass transmission system. D-c transmission is planned for a distance of 470 km at 800 KV and transmitted power of 750 Mw. There are 3 tables, 3 drawings and 5 Soviet references.
- Posse, A.V. and A.M. Reyder. Series Connection of Bridge Rectifiers and Rectifiers in a D-C Transmission System 115
 Mercury rectifiers produced today for d-c power transmission are designed for a voltage of about 100 kv. For transmission at 400 kv
- Card 5/13

Power Transmission by Direct and Alternating (Cont.)

SOV/1386

up to 600 kv, it is necessary to employ a cascade connection of bridge rectifiers, with one or several rectifiers in the arm of each bridge. The best combination of the number of bridges and the number of rectifiers in the arm of each bridge has not yet been definitely chosen. The difficult problems connected with this choice were investigated by NIIPT in the Kashira-Moscow h-v d-c transmission line. This article gives the results of investigation and makes recommendations. There are 2 tables, 7 oscillograms, 1 diagram and 3 references, of which 2 are Soviet and 1 German.

Shekhtman, M.G. and N.A. Shipulina. Parameters of Equipment of Conversion Substations in the Kashira-Moscow D-C Transmission Line

129

Firing of mercury rectifiers causes current oscillations in δ -tens and hundreds kc/sec frequency range. Study of this source of radio interference requires exact knowledge of equipment parameters for frequencies up to 1 Mc. The authors describe methods of measuring parameters and discuss the results obtained in the experimental Kashira-Moscow d-c transmission line. The three data tables are recommended for practical use for those working in radio interference suppression. 6 diagrams and no references.

Chart 6/13

Power Transmission by Direct and Alternating (Cont.)

SOV/1386

Shekhtman, M.G. Damping of Plate Voltage Oscillations After Extinction of
of Mercury Rectifiers in Conversion Substations 143

Experimental investigation was carried out by NIPT in the Kashira-Moscow d-c transmission line on damping of voltage oscillations caused by extinction of one or more mercury rectifiers in substations. The author describes this investigation and discusses the results. He also explains Engineer V.A. Merzhayevskiy's method of calculating the parameters of damping circuits, especially of power transformers. There are 3 tables, 3 diagrams, 1 appendix and no references.

Leshukov, N.D. Damping of Voltage Oscillations in Overhead D-C Transmission
Lines (as applied to the Stalingrad-Donbass transmission line) 161

Theoretical and experimental investigations were carried out by VEI and NIPT in the experimental Kashira-Moscow d-c transmission line on damping of voltage oscillations. Technical data from the Sweden-Gotland d-c transmission line were used by the author. The results of these investigations were put into practice in the Stalingrad-Donbass transmission line, chiefly according to recommendations of M.G. Shekhtman, V.M. Kvyatkovskiy, V.N. Vyatkin, N.A. Kanashchenko and A.A. Akopyan. There are 11 oscillograms and diagrams and 5 references, of which 2 are Soviet, 1 English, 1 Swedish, and 1 German.

Card 7/13

Power Transmission by Direct and Alternating (Cont.)

SOV/1386

Shiryayev, V.I. Grid Control System in the Kashira-Moscow D-C Transmission Line 181

The author explains a grid control system for switching-on mercury rectifiers in substations according to a definite sequence. He also forms practical conclusions and makes recommendations. There are 10 diagrams and 4 Soviet references.

Tormasov, V.V. Application of Germanium Diodes and Triodes in the Primary Trigger Pulse Circuit of a Grid Control System 197

The replacement of peak transformers or vacuum tubes in the above type of circuit with semiconductor diodes and triodes produces many advantages, especially in reliability, service life, power consumption and overall reduction in size of apparatus. The control and protection laboratory of NIPT carried out research on various aspects of the problem and worked out the design of this circuit (IPIF -- istochnik pervichnykh impulsov na poluprovodnikakh). There are 4 diagrams and 1 Soviet reference.

XAP 2

Power Transmission by Direct and Alternating (Cont.)

SOV/1386

Berlin, Ye.M. Current Regulator for H-V D-C Transmission Lines

201

A current regulator, developed by Tekhbyuro MES and installed in the Kashira-Moscow d-c line, proved to be too complicated and not sufficiently reliable because of the great number of tubes required (about 20). Another type of current regulator (a contactless type developed in 1944 by Professors I.L. Kaganov and A.A. Sakovich) also was found unsuitable due to its lag and narrow zone of regulation (50°-60°). The author was commissioned to design a "tubeless" current regulator, which he completed in 1952. Experimental investigations on it proved that the previous disadvantages were removed. There are 5 diagrams and 3 Soviet references.

Melik-Sarkisov, B.S. Investigation of Shunting Devices for D-C Transmission Lines

210

Investigations were carried out by NIPT in the Kashira-Moscow transmission line on the use of shunting devices during repair of mercury rectifiers, and without interruption of electric transmission. Shunt rectifiers and shunt disconnectors were tested and approved for use in the Stalin-grad-Donbass system. There are eleven diagrams and no references.

Card 9/13

Power Transmission by Direct and Alternating (Cont.)

SOV/1386

Shokhtman, M.G. Electromagnetic Power of a Synchronous Machine
Operating With a Rectifier as a Load

225

The author explains the theory of synchronous machines operating at full power against mercury rectifiers, and discusses the conditions of operation of synchronous machines from the point of view of their electromagnetic power. There are two diagrams and no references.

Shipulina, N.A. Bridge System With Capacitors Connected in Series To
Circuit Windings of the Transformer

234

The author explains the theory and discusses the results of experimental investigation on the above problem. There are 12 diagrams and no references.

Mel'gunov, N.M. Basic Features of a System With Bridge Converters
Connected Through Capacitors in D-C Transmission Lines

255

The author explains the theory and practical application of this system, which consists in the possibility of connecting bridge converters to an a-c network not through transformers, as is usually done, but through a bank of capacitors (N.M. Mel'gunov holds author's certificate No.105207, 1952, on this method). There is 1 appendix, 16 oscillograms and 5 Soviet references.

Card 10/13

Power Transmission by Direct and Alternating (Cont.)

SOV/1386

Kuchinskiy, G.S. The Possibility of Using Cable Paper in the Manufacture of Power Capacitors For D-C Transmission Lines 282

The author describes a method of reducing the cost of capacitor batteries operating in ripple voltage circuits by using cable paper in their manufacture. Cable paper costs 10 times less than conventional capacitor paper but its electric strength also is less and therefore its thickness must be greater. In determining the cost of Kva capacitors the author draws on the experience of the high-voltage laboratory of LPI (Leningradskiy politekhnicheskii institut) where cable-paper capacitors for d-c and ripple voltages have been produced on a semi-industrial scale since 1938. The technical editor suggests that plants manufacturing capacitors consider the author's results when producing capacitors for the above-mentioned conditions. He notes, however, that the cost relationships advanced by the author cannot yet be considered justified owing to the lack of operating experience which would indicate a long service life of cable-paper capacitors in comparison with conventional capacitors. In his comparisons the author used 35-40 KV/mm as the working voltage density. There are 2 diagrams and 4 Soviet references.

Card 11/13

Power Transmission by Direct and Alternating (Cont.)

SOV/1386

Kraychik, Yu.S. and A.M. Pintsov. Electrical Parameters of D-C Transmission Lines With Single-core Metal-sheathed Cables

289

The author obtains design parameters and equivalent circuits of d-c transmission lines consisting of single-core cable with a viscous saturant and lead or aluminum sheathing. There are 6 diagrams and 3 Soviet references.

SECTION II. ALTERNATING CURRENT

Koshcheyev, L.A. and Yu.A. Rozovskiy. Static Stability of Long-distance Electric Transmission Lines With Auxiliary Synchronous Condensers

299

NIIPT has carried out an investigation on comparative stability of long distance transmission lines with and without synchronous condensers. The investigations were carried out in the Stalingrad GES - Moscow line. The authors describe the tests and their results. They mention experimental work done by A.I. Kazachkov, V.A. Anreyuk, A.P. Zhilin and A.V. Burmistrov. I.A. Kosov and Ye.F. Arzamastsev participated in developing the stability comparison model. There are 7 diagrams and 7 references, all Soviet.

Card 12/13

Power Transmission by Direct and Alternating (Cont.)

SOV/1386

Tikhodeyev, N.N. and A.N. Tushnov. Flashover Voltages in Wide Air Spaces of A-C Lines

313

The intensive Soviet drive for construction of 400-KV and, in the near future, of 500 - 650 KV transmission lines caused GOST and NIPPT to commission the author to carry out a thorough investigation of known test results in the USA and new experimental work on this problem. The results have now been introduced into practice in transmission lines. The equivalent circuit method for cascade transformers was worked out by A.K. Gertsik. There are 6 diagrams and 13 references, of which 6 are English, 5 Soviet and 2 German.

Filippov, A.A. Method of Calculating Corona in Three-phase Transmission Lines With Bundle Conductors and a Wide Bundle Span

324

The author explains the application of bundle conductors to reduce the effects of corona and describes the method of calculating the charges and designing the bundle conductors. The results of his findings were checked experimentally by NII in 1954. There are 2 tables and 4 diagrams. There are no references.

AVAILABLE: Library of Congress

Card 13/13

JP/fal

5-1-59

AUTHORS: Aleksandrov, D. D., Glendzkaya, N. F., 57-28-4-34/39
Ptitsyn, S. V.

TITLE: The Electric Strength of a High-Voltage Valve (Elektricheskaya prochnost' vysokovol'tnogo ventilya)

PERIODICAL: Zhurnal Tekhnicheskoy Fiziki, 1958, Vol. 28, Nr 4, pp. 896-907 (USSR)

ABSTRACT: The electric strength of a standard valve in a static state without load current in dependence on the pressure of mercury-vapor, hydrogen, helium and air in the valve as well as on the interelectrode-distance was investigated here. It is shown that the electric strength of a high-voltage valve is determined by the rules governing the high-vacuum-breakdown. This law is observed in the case of an interelectrode-distance equal to 15 cm up to pressures of the order of magnitude $4-5 \cdot 10^{-3}$ mm torr in the case of air and mercury-vapors, $7-8 \cdot 10^{-3}$ mm torr in the case of hydrogen and $12-18 \cdot 10^{-3}$ mm torr in the case of helium. The transition from the domain of the high-vacuum breakdown into that

Card 1/2

The Electric Strength of a High-Voltage Valve

57-28-4-34/39

which follows Paschen's law takes place over a certain intermediate domain where the breakdown voltage decrease with a rise of pressure and with a reduction of the inter-electrode-distance. Under the conditions existing here the magnitude of the breakdown-voltage is influenced by the shape of the applied voltage. A pulsating voltage with a frequency of 50 cycles increases the value of its breakdown in the domain of the vacuum-breakdown, in comparison to the direct voltage, by almost 50%. There are 10 figures and 13 references, 6 of which are Soviet.

ASSOCIATION: Nauchno-issledovatel'skiy institut postoyannogo toka, Leningrad (Leningrad, Scientific Research Institute for Direct Current)

SUBMITTED: June 11, 1957

Card 2/2

ALEKSANDROV, D.D.; OLENDZSKAYA, N.F.; PTITSYN, S.V.

Investigating the electric strength of high-voltage mercury
rectifiers. Izv.NIIP no.3:5-19 '58. (MIRA 12:1)
(Mercury-arc rectifiers)

SOV/109-4-8-9/35

AUTHORS: Ptitsyn, S.V., Aleksandrov, D.D. and Olendzkaya, N.F.
TITLE: Influence of the Intermediate Electrodes on the Ignition
Voltage of a Self-sustaining Discharge in a High-voltage
Mercury Rectifier
PERIODICAL: Radiotekhnika i elektronika, 1959, Vol 4, Nr 8,
pp 1278 - 1285 (USSR)
ABSTRACT: Investigation of the influence of the intermediate
electrodes on the ignition of gas discharges (mercury
discharge, in particular) was carried out by means of
the rectifier shown in Figure 1. The anode input of this
tube is surrounded (see the figure) by the concentric
cylinders of a capacitive voltage divider, the inter-
cylinder insulators being made of steatite. The
intermediate transverse electrodes or so-called "inserts",
in the form of discs provided with ring slots and
circular holes in the middle, were attached to the end
of the concentric cylinders. All the components of the
rectifier, except the insulators, were made of high-
quality steel, the principal insulator being of porcelain. ✓

Card1/3

SOV/109-4-8-9/35

Influence of the Intermediate Electrodes on the Ignition Voltage
of a Self-sustaining Discharge in a High-voltage Mercury Rectifier

Full details of this tube can be found in the authors' earlier work (Ref 1). The Paschen curves for mercury vapour and various gases were taken at a voltage of 300 kV. The measurements were first carried out while the tube contained four transverse electrodes or inserts. The inserts were then taken out and the sharp ends of the capacity-divider cylinders were provided with ring flanges. The results of the measurements are shown in Figures 2 and 3, where the ignition voltage U_s is plotted as a function of $P_0 d$ where P_0 is the gas pressure referred to 0 °C and d is the distance between the grid and the anode (this was equal to 15 cm). Figure 2 shows the curves for the case of mercury vapour, while those of Figure 3 are for the rectifier filled with air. Curves 1 of Figures 2 and 3 were taken for a discharge gap without the intermediate electrodes, while Curves 2 were measured in the presence of the inserts. It is seen that in the latter case, the curves are shifted to the right,

Card2/3

27995

S/194/61/000/004/038/052

D201/D302

9,2150 (10 20, 1159, 1331)

AUTHORS: Aleksandrov, D.D., Olendzkaya, N.F. and Ptinsin, S.V.

TITLE: The influence of intermediate electrodes on the electric strength of a high voltage rectifier

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 4, 1961, 30-31, abstract 4 G204 (Izv. N.-i. in-ta postoyan toka, 1960, vol. 5, 5-11)

TEXT: The static electric strength of a high voltage rectifier with no current drawn at Hg vapor pressure within the limits 1-2 microns Hg, is determined by the laws of breakdown in vacuo. When the rectifier is loaded, the pressure observed at the walls and side-regions of the anode structure is 3-4 microns Hg, so that mercury condensation may occur at surfaces having a temperature of 30-40°C. The condensate drops, falling on to the more heated parts, may introduce short duration (up to 1 sec) increases in pressure - up to 6-8 microns Hg at the anode end. In these conditions the breakdown

Card 1/2

The influence of intermediate...

27995
S/194/61/000/004/038/052
D201/D302

is determined by the ignition of the working glow discharge. Investigations have shown that the presence of intermediate electrodes - inserts in the anode assembly increases the value of the breakdown voltage with increasing vapor densities. The effect becomes more pronounced with the decrease of the exposed surfaces of inserts and with the increase of their thickness. For a number of inserts greater than two, the breakdown voltage remains practically constant and independent of their numbers, provided their geometrical dimensions remain the same. In the presence of inserts the breakdown voltages for vapor of Hg, air and H₂ remain constant; in intervals without the inserts, the breakdown voltages decrease with the experiment being repeated. Pre-ageing by means of a glow discharge in an inert gas seems to be the most effective method of cleaning the surfaces. The pre-ageing conditions are given together with the curves of breakdown voltage characterising a well pre-aged rectifier. 4 references. [Abstracter's note: Complete translation]

Card 2/2

S/109/63/008/003/015/027
D271/D308

AUTHOR: Olendzkaya, N. F.

TITLE: The breakdown of a vacuum gap when conducting particles travel between the electrodes

PERIODICAL: Radiotekhnika i elektronika, v. 8, no. 3, 1963, 479-486

TEXT: This paper was read at the 10th Conference for Cathode Electronics, Tashkent, in November 1961. When free conducting particles are present on the electrodes, breakdown voltage is substantially lowered, the required field intensity being independent of the inter-electrode spacing and of the particle dimensions. Experimental work was undertaken with the purpose of finding reasons for breakdowns in mercury valves and hydrogen thyratrons which sometime occur at voltages lower than expected. Conducting particles were represented by little steel balls or drops of mercury. At a certain voltage, the ball would commence

Card 1/3

The breakdown of...

S/109/63/008/003/015/027
D271/D308

jumping between the electrodes without causing a breakdown. The breakdown occurred at a higher voltage and was initiated when the ball was near to one of the electrodes, usually the negative one. With mercury drops, the polarity did not matter, and the breakdown was initiated either when the drop was moving away from the electrode or when it approached the electrode. Breakdown voltage in function of the gap is plotted for various ball diameters and mercury drops, as well as in the absence of traveling particles. The dependence is linear and the size of balls or drops had no effect while the diameter was varied between 0.5 and 9 mm. Mercury drops lowered the breakdown voltage more than steel balls, presumably because of the ease of their deformation. The breakdown field was 60 kv/cm with steel balls, 20 - 25 kv/cm with mercury drops, and over 100 kv/cm in the absence of free particles. When a mercury drop was used in experiments, it gradually moved towards the negative electrode in the period of breakdowns caused by its jumps and finally adhered to it. When a vacuum breakdown is caused by separation of metal

Card 2/3

The breakdown of...

S/109/63/008/003/015/027
D271/D308

particles from the electrodes, the breakdown is determined by the conditions of this separation and by the enhanced field at the electrodes and not by the energy acquired by particles travelling in the gap. The help of L. A. Sen and S. V. Ptitsyn is acknowledged. There are 7 figures.

SUBMITTED: March 19, 1962

Card 3/3

L 22273-66 EWT(1)/EWT(m)/ETC(f)/EWG(m)/T

ACC NR: AR6005190

SOURCE CODE: UR/0058/65/000/009/G018/G018

AUTHOR: Olendzkaya, N. P.

TITLE: Influence of the surface area of electrodes on the breakdown voltage in vacuum

SOURCE: Ref. zh. Fizika, Abs. 9G148

REF. SOURCE: Sb. Proboy dielektrikov i poluprovodnikov. M.-L., Energiya, 1964, 97-101

TOPIC TAGS: dielectric breakdown, vacuum, surface property, pressure effect, spark gap

TRANSLATION: An investigation was made of the influence of the size of the electrode surface on the breakdown² voltage in a glass tube at voltages up to 100 kev, and in metal tubes up to 300 kv, with residual gas pressure 10^{-5} -- 10^{-6} mm Hg. In the case when the electrode surface area of the vacuum gap is smaller than a certain value that depends on the material and on the finish of the electrodes,

Card

1/2

L 22273-66

ACC NR: AR6005190

the level of the breakdown voltage under uniform field conditions is determined by the material of the electrode. If the area of the electrode is larger than this critical value, the breakdown voltage decreases exponentially. The decrease in the field intensity at the cathode (inhomogeneous field) gives rise to a decrease of the gap breakdown voltage. In the case of a cathode in the form of a needle, this effect apparently is overlapped by the influence of the reduction in the electrode area. It is noted that the results of the experiments remain the same in mercury at a vapor pressure of 10^{-3} mm Hg.

SUB CODE: 20

Card 2/2 nst.

OLENDZKI, Andzhey

Measuring the accelerations of the elements of the intermittent movement for films. Trudy LIKI no.8:47-57 '62.

(MIRA 16:6)

(Accelerometers)

(Motion-picture projectors—Testing)

OLENDZKI, W.

"Problem of using quick-break circuit breakers in 3000-volt direct-current rolling stock." p. 485. (Przegląd Elektrotechniczny, Vol. 29, no. 11/12, Dec 53, Warszawa)

SO: Monthly List of East European Accessions, Vol 3 No 6 Library of Congress Jun 54 Uncl

OLENDZKI, Witold, mgr inż.

Electrification of railroads in Japan. Przegl kolej
elektrotech 13 no.1:19-21 Ja '61.

KRAWCZYK, Saturnin, inż.; OLENDZKI, Witold, mgr inż.

Winter 1962/63. Przegl kolej elektrotech 15 no.5:117-118 Wz '63.

OLENDZKI, Z.

Cooperation with the State Automotive Transport in evaluating transportation in one branch of business. p. 140.

MOTORYZACJA. Warszawa. Vol. 10, no. 5, May 1955.

SOURCE: East European Accessions List (EEAL), LC, Vol. 5, no. 3, March 1956.

GLENDZKI, Z

GLENDZKI, Z. For more regularity in automotive freight traffic. p. 256.
Vol. 11, no. 10, Oct. 1956. MOTORYZACJA. Warszawa, Poland.

SOURCE: East European Accessions List (EEAL) Vol. 6, No. 4--April 1957

Country : Poland H-21
Category :
Abs. Jour. : 39930
Author : Olendzki, Z.
Institut. : Not given
Titlo : The Impregnation of Matchsticks
Orig Pub. : Przemysl Drzewny, 9, No 8, 26-30 (1958)
Abstract : Impregnation constitutes one of the steps in the technologic process of match production and is designed to prevent the glowing of the matchsticks after they are blown out; this purpose is achieved by the utilization of special chemicals (C). Among the C which best meet the requirements for such applications are orthophosphoric acid and its ammonium salts. The impregnation process (IP) is operated in two stages. In the first stage the matchsticks are saturated with the impregnating solution in a bath; this is followed by a second stage in which the matchsticks are further saturated as the impregnating

Card: 1/3

MOSHKIN, A.M., dots.; OLENEV, A.M., dots.; SHUVALOV, Ye.L.,
dots.; PEKAREVICH, V.M., retsennent; DAVYDOVA, I., red.

[Sverdlovsk Province] Sverdlovskaya oblast'. Sverdlovsk,
Sredne-Ural'skoe knizhnoe izd-vo, 1964. 225 p.
(MIRA 17:11)

OLENEV, A.M.

Some new data on the relief of northwestern Transbaikal. Izv.Vses.geog.ob-va
85 no.5:547-558 S-O '53. (MLHA 6:10)

(Transbaikalia--Physical geography) (Physical geography--Transbaikalia)